

Amendments to the Claims:

Claims 1-4 are pending. This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims:

Claim 1 (currently amended): A non-contact tonometer comprising:
an alignment light source for projecting a light flux for alignment to a cornea of an eye to be examined;

a sensor for capturing an image the eye to be examined;
image processing means for picking up a plural specific areas directed to light of the light flux for alignment which is reflected by the eye to be examined, within an image signal obtained by the sensor;

calculation means for calculating a reference value on the basis of the processed image signals obtained on the plural specific areas;

a cornea deformation means for pressurizing air in a cylinder, and deforming the cornea of the eye to be examined by blowing the pressurized air onto the cornea of the eye to be examined;

~~alignment detection means for receiving reflection light of said light flux for alignment from the eye to be examined to detect an alignment state of the eye to be examined;~~

~~pressurizing means for blowing a fluid onto the cornea of the eye to be examined to deform the cornea;~~

an intraocular pressure measurement light source for projecting a light flux for measurement to the eye to be examined;

intraocular pressure measurement light receiving means for detecting a reflected light quantity of said the light flux for measurement from the cornea of the eye to be examined;

~~deformation detection means for detecting a predetermined output value from said intraocular pressure measurement light receiving means to detect certain deformation of the~~

~~cornea;~~

intraocular pressure calculation means for calculating an intraocular pressure on the basis of an output signal of the intraocular pressure measurement light receiving means and a pressure value in the cylinder; and

reliability determination means for providing a reliability level of the calculated intraocular pressure on the basis of the output signal of the intraocular pressure measurement light receiving means and the reference value ~~for comparing an output of said intraocular pressure measurement light receiving means and a reference value to determine reliability;~~
~~— wherein said reference value is changed in accordance with a detection result of said alignment detection means, and said detection result is a brightness of bright points based on image data of an anterior ocular segment at a time of alignment.~~

Claim 2 (canceled).

Claim 3 (currently amended): A non-contact tonometer according to claim 1, wherein said reference value is changed based on a peak value of the processed image signal obtained on the plural specific areas ~~the alignment light flux reflected from the eye to be examined detected by said alignment detection means.~~

Claim 4 (currently amended): A non-contact tonometer according to claim 1, wherein said intraocular pressure measurement light receiving means performs additional measurement of the intraocular pressure when the output of said reliability determination means is of high reliability level.

Claim 5 (withdrawn): A method of measuring intraocular pressure comprising the steps of:

projecting an alignment detection light flux to an eye to be examined;

performing alignment adjustment based on reflected light of the alignment detection light flux;

blowing a fluid onto the eye to be examined while projecting an intraocular pressure measurement light flux to the eye to be examined;

receiving reflected light of said intraocular pressure measurement light flux from said eye to be examined and outputting a received light signal;

determining a reference value to be compared with said received light signal based on received light quantity of said reflected light of the alignment detection light flux, wherein said reference value is based on a brightness of bright points based on image data of an anterior ocular segment at a time of alignment; and

determining validity of said received light signal by comparing said reference value and a level of the received light signal.

Claim 6 (withdrawn): A method of measuring intraocular pressure according to claim 5 further comprising a step of measuring an intraocular pressure value in the case that it is determined that said received light signal is valid.

Claim 7 (withdrawn): A method according to claim 5 further comprising a step of displaying the measured value on a monitor in the case that it is determined that said received light signal is valid.

Claim 8 (withdrawn): A method of measuring intraocular pressure comprising the steps of:

projecting an alignment detection light flux to an eye to be examined;

receiving reflected light of said alignment detection light flux from the eye to be examined;

projecting intraocular pressure measurement light flux to the eye to be examined; and
determining validity of measurement of the intraocular pressure by comparing a reference value based on a brightness of bright points based on image data of an anterior ocular segment at a time of alignment and determined based on said reflected light of the alignment light flux from said eye to be examined, and a level of reflected light of said intraocular pressure measurement light flux.